California Postsecondary Education Commission Improving Teacher Quality State Grants Program **Project Description Project Title** California Math Project Supporting Teachers to Retention (CMP STIR) Grant Amount: \$5,275,920 Grant Period: August 1, 2006 - September 30, 2011 Grade Level: 6 - 12 Subject Matter: Mathematics Institute of Higher □ University of California, Los Angeles (UCLA) Education Additional UCLA, Department of Mathematics Partners: Need for There is a well-documented shortage of fully credentialed mathematics teachers in California Project/ classrooms. Compounding this problem is the turnover of mathematics teachers through both Population To teacher attrition and teacher migration. Turnover of mathematics and science teachers is about Be Served: 16% each year (compared to 14.3% for all teachers) with about half leaving teaching and half moving to other schools. In California, 27% of teachers with single-subject certification leave teaching by the end of the fourth year. The data show that high-poverty public schools lose on average over one-fifth of their faculty each year. Finally, many teachers, particularly in middle schools, are not "highly qualified" under NCLB. Many factors contribute to teacher turnover (e.g., job dissatisfaction, retirement, or personal factors). Recruiting more teachers will not solve the problem of the shortage of mathematics teachers; addressing retention is also necessary. **Project Goals:** Goal I - Provide a coherent and comprehensive induction and/or support program for teachers of mathematics that will: (1) increase the retention of teachers of mathematics (2) increase the retention of teachers of mathematics within the school (3) deepen teachers' mathematics content understanding and extend pedagogical content knowledge, (4) increase the leadership roles and/or educational advancement of mathematics teachers, and (5) establish a collegial and supportive school culture. Goal II - Conduct research that adds to the knowledge base on mathematics teacher retention Goal III - Disseminate findings broadly CMP has held an internal competition and selected 10 CMP sites to provide a coherent and Summary of Activities: comprehensive induction and /or support program for teachers. Each CMP STIR Site will provide intensive development (PD) totaling 15 days and systematic and sustained support for teachers at the school site (e.g., administrative support, mentoring and coaching, Lesson Study, school site networking, data reflection, or access to resources) for at least 27 teachers (retention cohort) for three years. In the fourth year, the sites will focus on increasing leadership roles and/or education advancement of the retention cohort and provide PD for 10 additional teachers. In year 5, another 10 teachers will be provided PD focusing on teacher retention. The CMP will monitor the sites and provide technical assistance when needed. Extensive research will be conducted with the following research questions addressed: Does mathematics PD improve the retention of these mathematics teachers in the profession? Does PD improve the retention of mathematics teachers in their schools? Does PD increase the content knowledge and the pedagogical content knowledge of the participants? Does PD increase the leadership roles and/or educational advancement for the participants? Each site has a designated a Research Associate who will collect all the data, administer measures and enter information in the Online Information System (OIS) database. Dissemination will include research briefs, presentations at local, state, and national conference, sponsorship of a National Teacher Retention Dissemination Conference, and articles submitted to refereed research journals. Outcomes Teachers participating in the retention cohort professional development will have a higher Expected: teacher retention rate and engage in more leadership and career enhancement activities than teachers in the comparison cohort. Additionally, retention cohort teachers will show increases in mathematics content knowledge as a result of participation. Teachers Students 470 172.000 Served Served Susie W. Hakansson Email: Phone: IHE Contact shakans@ucla.edu (310) 794-9885